REMARKS/ARGUMENTS

Applicants have received the Office Action dated March 7, 2007 (hereinafter, "Office Action"), in which the Examiner: 1) rejected claims 1-8 and 10-22 under 35 U.S.C. § 102(b) as being allegedly anticipated by IBM Disclosure NP9406439 (hereinafter "IBM '439")[1]; 2) rejected claims 20-22 as being allegedly anticipated by Abramov et al. (U.S. Pat. No. 6,327,676, hereinafter "Abramov"); 3) rejected claims 14-22 under 35 U.S.C. § 102(e) as being allegedly anticipated by Berry, Jr. et al. (U.S. Pub. No. 2004/0187051, hereinafter "Berry"); 4) rejected claim 9 under 35 U.S.C. § 103(a) as being allegedly obvious over IBM '439 in view of Webopedia ("http://www.webopedia.com/TERM/I/I2C.html," hereinafter "Webopedia"); 5) rejected claims 10-13 under 35 U.S.C. § 103(a) as being allegedly obvious over IBM Disclosure NN9210142 (hereinafter "IBM '142"); 6) rejected claims 15-17 under 35 U.S.C. § 103(a) as being allegedly obvious over Berry in view of IBM '439; 7) objected to claim 2 as being of improper dependent form, and further objected to claims 18 and 19 as dependent upon a rejected base claim but otherwise allowable; and 8) rejected claim 1 under 35 U.S.C. § 112, second paragraph. With this Response, Applicants have amended claims 1 and 14, and canceled claim 2. Based on the amendments and arguments contained herein, Applicants believe this case is in condition for allowance.

I.   THE IBM '439 ANTICIPATION REJECTIONS

Applicants respectfully note that the Examiner initially indicated in the Office Action that claims 1-8 and 10-22 were rejected as allegedly anticipated by IBM '439. Nonetheless, in the discussion regarding claims 7 and 8 in paragraphs 8 and 9 of the Office Action, the Examiner cited Abramov, though the specific references were consistent with IBM '439. Thus, for purposes of this Response,

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[1] Applicants note that although claims 1-8 and 10-22 are rejected as allegedly anticipated by IBM '439 in paragraph 2 of the Office Action, only claims 1-6 are recited as rejected on this basis in the claim-by-claim discussion in subsequent paragraphs.

Applicants are assuming that the Examiner intended the rejection of claims 7 and 8 to be based upon IBM '439. Regarding independent claim 14 (the only independent claim of the group consisting of claims 10-22), the Examiner did not provide any additional explanation or discussion regarding the rejection of independent claim 14 as allegedly anticipated by IBM '439. Applicants thus cannot respond to the rejection, as a specific basis for the rejections has not been provided. Applicants respectfully request clarification regarding the rejection of independent claim 14 as allegedly anticipated by IBM '439.

Regarding independent claim 1, Applicants respectfully point out that the discussion in paragraph 2 of the Office Action fails to take into account the requirement of claim 1, as amended[2] (already stated, in substance, in the prior Response of December 21, 2006, hereinafter "Prior Response"), that the switching device of the claimed memory module be "attached to an outer surface of one of the plurality of memory circuits," the memory module of claim 1 comprising the plurality of memory circuits. The device taught by IBM '439 is described as a "memory interposer" that "is plugged into one of the Single In-Line Memory Module (SIMM) sockets," wherein "[t]he SIMM target for fault injection plugs directly into the memory interposer." Thus, IBM '439 teaches a device that is in between a memory module and a memory module socket. The only contact between the memory interposer and the memory module is at the edge connector of the SIMM. Applicants respectfully submit that such contact cannot be reasonably interpreted to encompass attaching a switching device to an outer surface of a memory circuit. IBM '439 thus does not teach or even suggest attaching the switch to an outer surface of a memory circuit within the memory module, and none of the cited art overcomes the deficiencies of IBM '439. For at

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[2] Applicants note that the amendment of claim 1 addresses a § 112 issue raised by the Examiner and is not in response to the IBM '439 anticipation rejection alleged by the Examiner.

least these reasons, Applicants respectfully submit that independent claim 1, as amended, and all claims that depend upon it, are in condition for allowance.

II.   THE ABRAMOV ANTICIPATION REJECTIONS

Applicants respectfully note, for the record, that the Examiner has failed to address the arguments presented by Applicants in the Prior Response regarding the rejection of independent claim 20 as allegedly anticipated by Abramov. The Examiner instead has simply restated the rejections, verbatim, previously presented in the Office Action of August 22, 2006 (hereinafter "Prior Office Action"), without explanation or rebuttal of the previously presented arguments.

Applicants again respectfully traverse the Examiner's rejection of independent claim 20, noting the claim requires "a plurality of means for storing data, wherein at least one of the means for storing data *is integrated* with a means for driving a simulated hardware error" (emphasis added). The test equipment described by Abramov (an HP logic analyzer and signal generator) is external to the addressable memory, as well as to the entire system described. It is not even physically possible to attach the test equipment described in Abramov to the surface of a memory circuit while still being able to install and operate the memory circuits within a computer system. Abramov thus does not teach or even suggest integrating the test equipment with the addressable memory described, and none of the cited art overcomes the deficiencies of Abramov. For at least these reasons Applicants respectfully submit that claim 20, as well as those claims that depend upon it, are all in condition for allowance.

III.   THE BERRY ANTICIPATION REJECTIONS

Applicants respectfully note that although the Examiner stated that claims 14-22 were rejected as anticipated by Berry, the discussion provided by the Examiner only addressed independent claim 14. Nonetheless, Applicants respectfully submit that neither independent claim 14, as amended, nor independent claim 20 is anticipated by Berry or any of the cited art.

Regarding independent claim 14, Applicants respectfully note that the claim, as amended, requires "memory comprising a memory module and the memory module comprising a plurality of memory circuits ... wherein the switching device is attached to an outer surface of one of the plurality of memory circuits." Berry does not teach or even suggest attaching a switching device to an outer surface of a memory circuit, and none of the cited art overcomes the deficiencies of Berry. For at least these reasons, Applicants respectfully submit that independent claim 14, and those claims that depend upon it, are in condition for allowance.

Similarly, independent claim 20 requires "a plurality of means for storing data, wherein at least one of the means for storing data is integrated with a means for driving a simulated hardware error." Applicants respectfully note that claim 20 is a means-plus-function claim under 35 U.S.C. § 112, paragraph 6, and as such the claim is limited to the embodiments disclosed in the specification. Applicants respectfully call the Examiner's attention to paragraph [0019] of the specification, which describes the switching device (the means for driving) as being held in place on an outer surface of a packaged memory (the means for storing) by epoxy. Berry does not teach or even suggest integrating a means for storing with a means for driving in this manner, and none of the prior art overcomes the deficiencies of Berry. For at least these reasons, Applicants respectfully submit that independent claim 20, as well as those claims that depend upon it, are all in condition for allowance.

IV.   THE OBVIOUSNESS REJECTIONS

Applicants respectfully note that each of the obviousness rejections made by the Examiner relies on the same art as that relied upon in the anticipation rejections detailed above. Because none of the cited art discloses all of the claim limitations, and because no combination of the cited art overcomes these

deficiencies, Applicants respectfully submit that the obviousness rejections are rendered moot in light of the above discussion.

V.   THE CLAIM OBJECTIONS

Regarding the Examiner's objection to dependent claim 2, Applicants have cancelled the claim. With regard to the Examiner's objection to claims 18 and 19, Applicants respectfully submit that for at least the reasons described above regarding independent claim 14, as amended, claims 18 and 19, which depend upon claim 14, are in condition for allowance.

VI.   THE § 112 REJECTION

Regarding the Examiner's rejection of claim 1 under § 112, second paragraph, Applicants have amended the claims recitation of "the outer surface" to now read "an outer surface." Applicants respectfully request withdrawal of the rejection.

VII.   CONCLUSION

In the course of the foregoing discussions, Applicants may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the cited art which have yet to be raised, but which may be raised in the future.

Applicants respectfully request reconsideration and that a timely Notice of Allowance be issued in this case. It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including

fees for net addition of claims) are hereby authorized to be charged to Hewlett-Packard Development Company's Deposit Account No. 08-2025.

Respectfully submitted,

/Roberto de Leon/

Roberto de Leon
PTO Reg. No. 58,967
CONLEY ROSE, P.C.
(713) 238-8000 (Phone)
(713) 238-8008 (Fax)
ATTORNEY FOR APPLICANTS

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
Legal Dept., M/S 35
P.O. Box 272400
Fort Collins, CO 80527-2400